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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,323	03/06/2002	Steven M. Zink	02SW049	9035

7590 11/19/2008

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EXAMINER	
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ART UNIT	PAPER NUMBER
2452	

MAIL DATE	DELIVERY MODE
11/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/092,323	ZINK ET AL.	
	Examiner	Art Unit	
	LAN-DAI Thi TRUONG	2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08/21/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-19,21,22,24-28,31 and 33-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-19, 21-22, 24-28, 31 and 33-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is response to communications: application, filed on 03/06/2002; amendment filed on 08/21/2008. Claims 1-7, 9-19, 21-22, 24-28, 31 and 33-39 are pending; claims 1, 21 and 33 are amended; claims 8, 20, 23, 29-30 and 32 are canceled.

Response to Arguments

2. The applicant's arguments filed on 08/212008 have fully considered.

3. In regard to the newly amended limitations (claims 1 and 33), the examiner has provided further citations from the reference to show the teachings of the newly amended features (see rejection below).

4. In regard to applicant's arguments (to claims 21 and 31) are not persuasive; the previous rejections (mailed on 05/21/2008) are retained.

5. In response to applicant's arguments to claims 1 and 33 with respect that the references fail to show certain features of applicant's invention (i.e., aggregating one or more selected data items in a data packet for sending and receiving entity into an aggregated subset of data items according to a beginning address of a first item in a group, followed by a length and the followed by the values relating to the items in the group), it is noted that the features upon which applicant relies (i.e., ... in a data packet for sending and receiving entity... according to a beginning address of a first item in a group, followed by a length and the followed by the values relating to the items in the group) was not recited in the rejected claim(s) filed on (01/10/2008). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. In response to applicant's arguments to claims 1, 21 and 31 and with respect that the references fail to show certain features of applicant's invention (i.e. employing only the handle information as a reference with consistent length to generate an update data packet to update locations in the industrial controller), it is noted that the features upon which applicant relies (i.e., ... only...) was not recited in the rejected claim(s) filed on (01/10/2008). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In fact, the claim originally was disclosed as "...employs the handle information as a reference with consistent length to generate update data locations in the industrial controller." This limitation is reflected through combination ideas from Muller and Carter. Carter discloses an industrial controller system, wherein remote users can access and influence control functions from the industrial controller by modifying control parameters or/and procedure instructions (Carter: abstract; figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10). While Muller covers shortcomings from Carter's (i.e. employing the handle information as a reference with consistent length to generate update data locations). Particularly, Muller discloses method of using a free descriptor ring for identifying empty buffers from a host memory. The free descriptor ring includes "descriptors" (which reads on 'handle information' as claimed) as memory location references (i.e. available memory addresses/ pointers for storing packets) (Muller, column 55, lines 25-67; column 56, lines 1-45; column 50, lines 47-59; column 4, lines 66-67; column 5, lines 1-29). Consequently, those ideas from Muller and Carter clearly read on the claim feature

of "employs the handle information as a reference with consistent length to generate update data locations in the industrial controller."

7. Regarding applicant's arguments to claims 21 and 31 with respect to the cited references do not disclose feature of "adding data items of interest to the object, the data items arranged according to at least one of contiguous or non-contiguous address memory locations" are not persuasive. Muller discloses method of reassembling multiple "related packets" (which reads on 'data items of interest' as claimed) into one "memory space/queue/array" (which reads on 'the object' as claimed) (Muller, column 55, lines 15-20; column 4, lines 7-11; figure 12, items 1206, 1210). Although Muller does not explicitly discloses arranging reassembled packets according to at least one of contiguous or non-contiguous address memory locations; however it would have been obvious in the art to understand that reassembled packets should be arranged according to contiguous or non-contiguous address memory locations/queue (Muller, figure 1, item 116; column 52, lines 50-63; column 53, lines 53-65; column 4, lines 45-57; column 8, lines 20-37; column 10, lines 48-67; column 44, lines 50-65).

Claim rejections-35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7, 9-19, 21-22 and 24-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 21:

The phase "beginning address of a first data item in a group" renders the claims indefinite. The phase "beginning address" is not clearly defined by the claim, the specification does not provide a standard definition for the phase "beginning address", and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant does not clearly define what type of "address"; the term "address" can be broadly interpreted as network address or memory address. Furthermore, Applicant fails to define where the address begins at. Appropriate corrections are required.

Regarding claims 2-7, 9-19, 22 and 24-28:

Those claims are rejected under rationales of claims 1 and 21.

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-12, 14-19 and 33-39 are rejected under 35 U.S.C 103(a) as being un-patentable over Crater et al. (U.S. 6,201,996) in view of Muller et al. (U.S. 6,480,489).

Regarding claim 1:

Carter discloses the invention substantially as claimed, including an industrial controller system, comprising:

an industrial controller: (Carter discloses an industrial controller system: column 3, lines 58-67; abstract).

communication component associated with the entity remote from the industrial controller: (in Carter's industrial controller system, remote computers are capable of communications with the industrial controller through web accesses: column 3, lines 58-67; abstract).

an primary aggregation component associated with an industrial; defining and installing the primary aggregation component at the industrial controller by an entity remote from the controller: (In Carter's industrial controller system, remote users can access and define control functions of the industrial controller by modifying control parameters or/ and procedure instructions through visual presentations or/ and templates in form of a webpage: abstract; Fig. 2; column 3, lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

a component associated with the entity remote from the industrial controller: (the Office interprets 'a component' is same as 'communication component' disclosed above. The component/communication component should be included in the remote entity to support for communications with the industrial controller: column 3, lines 58-67; abstract).

However, Carter does not explicitly disclose aggregating one or more selected data items into an aggregated subset of data items by employing one or more of a beginning address of a first data item in a group, a length and values relating to the data items in the group.

In comparable art, Muller discloses method of reassembling multiple related packets into one buffer/queue/array prior transmitting them to a host: (Muller, column 53, lines 32-39;

column 54, lines 46-50; column 55, lines 15-20; column 4, lines 7-11; figure 12, items 1206, 1210; column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67). Muller further teaches methods of sparing packet header information (e.g. protocol) to identify relate protocol type packets, then reassembling the relate packets into one buffer/queue/array by employing write pointers/indexes/addresses as memory location references to identify queue locations for storing a packets (e.g. a first packet into beginning address and subsequent relate packets into next subsequent addresses...etc). (Muller, column 53, lines 32-39; column 54, lines 46-50; column 55, lines 15-20).

transmitting the aggregated the subset of data items via a singular communications packet across a network: (reassembled related packets are transmitted to a host in form of single buffer/datagram: Muller, column 53, lines 32-39; column 54, lines 1-67; column 55, lines 15-20;, column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67).

adding at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations: (Muller discloses that multiple packets are aggregated into a datagram, this process is implemented by a respective processor according protocol type. The numbers of processors in the multiprocessor computer and packets protocols are correlated together. It would have been obvious to one of ordinary skill in the art to know that if packets demands or network protocols are increased then numbers of processors should be increased: column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

receives handle information related to the selected data items and employs the handle information as reference with consistent length to generate an update data packet to update data

locations: (Muller discloses method of using a free descriptor ring for identifying empty buffers from a host memory where reassembled relate packets will be stored at. The free descriptor ring includes "descriptors" (which reads on 'handle information' as claimed) as memory location references (i.e. available memory addresses/ pointers for storing packets) (Muller, column 55, lines 25-67; column 56, lines 1-45; column 50, lines 47-59; column 4, lines 66-67; column 5, lines 1-29; figure 8).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Muller's ideas of reassembling relate packets into one buffer/queue/array for transferring to a host into Carter's system in order to provide an efficient data transmission network (e.g. reducing bandwidth/memory utilization) see (column 3, lines 1-28, 44-65; column 4, lines 6-11).

Regarding claim 2:

In addition to rejection in claim 1, Crater- Muller further discloses client application that can selects and request subsets of data items from the controller: (Carter discloses the remote computer can retrieve, monitor, supervise, and modifies control parameters of action procedures/ of control structures: abstract; column 3, lines 58-67; column 4, lines 45-67; column 9, lines 60-67; column 10, lines 7-52; column 11, lines 28-67; column 12, lines 1-9; column 5, lines 52-67).

Regarding claim 3:

In addition to rejection in claim 2, Crater- Muller further discloses Human and Machine Interface: (Crater: column 19, line 27).

Regarding claim 5:

Crater- Muller discloses a method as discuss in claim 1, which further includes sending request to the industrial controller relating to the subset of data items: (Carter: column 3, lines 58-67; column 4, lines 45-67; column 9, lines 60-67; column 10, lines 7-52; column 11, lines 28-67; column 12, lines 1-9; column 5, lines 52-67).

Regarding claims 6-7:

In addition to rejection in claim 5, Crater- Muller further discloses step of including tag and value information associated with tag in to response, the tag and value information relating to the subset of data items; employing the tag and value information to build the primary aggregation component from the response: (reassembling the relate packets into one buffer/queue/array by employing write pointers/indexes/addresses as memory location references to identify queue locations for storing a packets (e.g. a first packet into beginning address and subsequent relate packets into next subsequent addresses...etc). (Muller, column 53, lines 32-39; column 54, lines 46-50; column 55, lines 15-20; abstract).

Regarding claim 4:

In addition to rejection in claim 2, Crater- Muller further discloses the communication driver adapted to communicate with a communication server associated with a client application: (Crater discloses network interface/ or machine interface adapted to communicate with server and remote computer: figure 2, items 215, 210; figure 3, item 300).

Regarding claim 11:

Crater- Muller discloses a method as discuss in claim 1, which further includes object including association classes: (Crater: column 11, lines 1-15).

Regarding claim 12:

Crater- Muller discloses a method as discuss in claim 11, which further includes class attributes information such as revision level information of the object, an instance number, and a number of instances of an associated class: (Crater: column 11, lines 1-15).

Regarding claim 9:

In addition to rejection in claim 1, Crater- Muller further discloses removing the one or more secondary aggregation component: (Muller discloses that multiple packets are aggregated into a datagram, this process is implemented by a respective processor according protocol type. The numbers of processors in the multiprocessor computer and packets protocols are correlated together. It would have been obvious to one of ordinary skill in the art to know that if packets demands or network protocols are increased then numbers of processors should be increased; and vice versa, the processor should be removed when decreasing data demands for save memory purpose: column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

Regarding claim 10:

In addition to rejection in claim 1, Crater- Muller further discloses comprising at least one of dynamically increasing and decreasing the amount of selected data items in the primary aggregating component based on upon data demands received from the network: (as similar to disclosures addressed in claim 9: Muller, column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

Regarding claim 14:

In addition to rejection in claim 11, Crater- Muller further discloses services include at least one of Get All Attributes, Get All List, Set Attribute List, Reset, Start, Stop, Create Object and delete Object: (Muller: column 35, lines 45-50).

Regarding claim 15:

In addition to rejection in claim 11, Crater- Muller further discloses the data buffer including at least one of 1 to L data items, L being an integer, and includes at least one of the following types: single valued elements, bit, byte, 16 bits, 32 bits, greater than 32 bit configurations, unsigned integers, signed integers, floating point elements, single dimension array, multiple dimension array configurations, and user defined tag: (Muller: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4).

Regarding claim 16:

In addition to rejection in claim 15, Crater- Muller further discloses the single value elements include at least one of tag identifier and associated value: (tag information (e.g. predetermined protocol included in sending packet) is received at a transfer engine: Muller, abstract).

Regarding claim 17:

In addition to rejection in claim 15, Crater- Muller further discloses single dimension array include at least one of ID, value, and begin array element ID and a length: (It would have been obvious to one of ordinary skill in the art to know that those elements should be included in Muller' arrays: column 35, lines 45-50).

Regarding claim 18:

In addition to rejection in claim 1, Crater- Muller further discloses removing the primary aggregation component based upon at least one of a loss of communications and connection time out: (Muller, column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

Regarding claim 19:

In addition to rejection in claim 1, Crater- Muller further discloses removing the primary aggregation component based upon an explicit command: (Muller, column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

Regarding claim 33:

Carter discloses the invention substantially as claimed, including industrial controller, comprising:

a first component that processes information received from a remote entity: (Carter discloses remote users can access and influence control functions of the industrial controller by modifying control parameters or/ and procedure instructions those displayed through visual presentations or/ and templates in form of a webpage containing numbers of instructions and/or procedures: abstract; Fig. 2; column 3, lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

the primary component; installing aggregating component at industrial controller by an entity remote from the industrial controller: (in Carter's system, the control functions of the industrial controller are accessed and influenced by remote users: abstract; Fig. 2; column 3,

lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

communications component associated with the entity remote from the controller: (in Carter's industrial controller system, remote computers are capable of communications with the industrial controller through web accesses: column 3, lines 58-67; abstract).

a component associated with the entity remote from the industrial controller: (the Office interprets 'a component' is same as 'communication component' disclosed above. The component/communication component should be included in the remote entity to support for communications with the industrial controller: column 3, lines 58-67; abstract).

However, Carter does not explicitly discloses aggregating one or more selected data items into an aggregated subset of data items by employing one or more of a beginning address of a first data item in a group, and a length and values relating to the data items in the group.

Muller discloses method of reassembling multiple related packets into one buffer/queue/array prior transmitting them to a host: (Muller, column 53, lines 32-39; column 54, lines 46-50; column 55, lines 15-20; column 4, lines 7-11; figure 12, items 1206, 1210; column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67). Muller further teaches methods of sparing packet header information (e.g. protocol) to identify relate protocol type packets, then reassembling the relate packets into one buffer/queue/array by employing write pointers/indexes/addresses as memory location references to identify queue locations for storing a packets (e.g. a first packet into beginning address and subsequent relate packets into next subsequent addresses...etc). (Muller, column 53, lines 32-39; column 54, lines 46-50; column 55, lines 15-20).

transmitting the subset of data items via a singular communications packet across a network: (reassembled related packets are transmitted to a host in form of single buffer/datagram: Muller, column 53, lines 32-39; column 54, lines 1-67; column 55, lines 15-20;, column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67).

adding at least one secondary aggregation component based upon at least one of increased data demands and network protocol considerations: (Muller discloses that multiple packets are aggregated into a datagram, this process is implemented by a respective processor according protocol type. The numbers of processors in the multiprocessor computer and packets protocols are correlated together. It would have been obvious to one of ordinary skill in the art to know that if packets demands or network protocols are increased then numbers of processors should be increased: column 49, lines 51-62; column 50, lines 22-40; column 52, lines 14-29; column 17, lines 50-54; column 22, lines 50-60; column 23, lines 14-24).

receives handle information related to the selected data items and employs the handle information as reference with consistent length to generate an update data packet to update data locations: (Muller discloses method of using a free descriptor ring for identifying empty buffers from a host memory where reassembled relate packets will be stored at. The free descriptor ring includes "descriptors" (which reads on 'handle information' as claimed) as memory location references (i.e. available memory addresses/ pointers for storing packets) (Muller, column 55, lines 25-67; column 56, lines 1-45; column 50, lines 47-59; column 4, lines 66-67; column 5, lines 1-29; figure 8).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Muller's ideas of reassembling relate packets into one

buffer/queue/array for transferring to a host into Carter's system in order to provide an efficient data transmission network (e.g. reducing bandwidth/memory utilization) see (column 3, lines 1-28, 44-65; column 4, lines 6-11).

Regarding claim 34:

Crater-Muller discloses a method as discuss in claim 33, which further includes component is a processor adapted to process access to variable memory storing the one or more selected data items: (Muller: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4).

Regarding claim 35:

Crater-Muller discloses a method as discuss in claim 34, which further includes component to aggregate and transmit the subset of data items: (Muller: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4).

Regarding claim 36:

In addition to rejection in claim 35, Crater-Muller further discloses the network is at least one of an Ethernet, ControlNet, a DeviceNet, RS-232, RS-422, RS-485: (Crater's system implements for "industrial controlling" which shares functionality with either controlNet or DeviceNet as claimed: abstract).

Regarding claim 37:

In addition to rejection in claim 35, Crater-Muller further discloses the communication driver adapted to communicate with a communication server associated with a client application: (Crater discloses network interface/ or machine interface adapted to communicate with server and remote computer: figure 2, items 215, 210; figure 3, item 300).

Regarding claim 38:

In addition to rejection in claim 37, Crater-Muller further discloses HMI: (Crater: column 19, line 27).

Regarding claim 39:

This claim is rejected under rationale of claim 33.

Claim 13 is rejected under 35 U.S.C 103(a) as being un-patentable over Crater-Muller in view of Bhatt et al. (U.S. 6,097,399).

Regarding claim 13:

Crater-Muller discloses the invention substantially as disclosed in claim 11, but does not explicitly teach setting for at least one of object update times, event triggers, whether to update the object based on rate, demand and other criteria, wherein a data stream triggers are located, whether to continue on an over flow, number of driers currently installed, timestamp information, size of buffers, start times, and object lifetime settings.

In analogous art, Bhatt discloses aggregating data items to produce an aggregated data based on intervals: (column 5, lines 11-14; column 6, lines 1-17).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bhatt's ideas of producing an aggregated data from received selecting data items with Crater-Muller's system in order to speed up transmitting time, see (Bhatt: column 4, lines 45-55).

Claims 21-22, 24 and 31 are rejected under 35 U.S.C 103(a) as being un-patentable over Muller et al. (U.S. 6,480,489) in view of Crater et al. (U.S. 6,201,996).

Regarding claim 21:

Muller discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code, the method comprising:

requesting tag information: (tag information (e.g. predetermined protocol included in sending packet) is received at a transfer engine: Muller, abstract).

building an object from tag information: (predetermined protocol is used as packet's flow key identifier to associate with other packets in the same flow for reassembling them into reassemble data/ datagram: Muller, abstract).

installing the object: (transmitting the datagram over a network: Muller, column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67; figure 18 C, item 1826).

updating object data: (sending to the host a completion descriptor including empty buffer addresses/ indexes/pointers as references for identifying stored or storing packets locations in the buffer. The host then uses the provided completion description to allocate the buffer locations for store packets into those allocated buffer locations: Muller, column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

adding data items of interest to the object, the data items arranged according to at least one contiguous or non-contiguous address memory locations; receiving data from the object: (Muller discloses method of reassembling multiple "related packets" (which reads on 'data items of interest' as claimed) in a communication flow in one "memory space" (which reads on 'the object' as claimed) (Muller, column 55, lines 15-20; column 4, lines 7-11; figure 12, items 1206, 1210). Although Muller does not explicitly discloses arranging reassembled packets according to at least one of contiguous or non-contiguous address memory locations; however it would have

been obvious in the art to understand that reassembled packets should be arranged according to contiguous or non-contiguous address memory locations/queue (Muller, figure 1, item 116; column 52, lines 50-63; column 53, lines 53-65; column 4, lines 45-57; column 8, lines 20-37; column 10, lines 48-67; column 44, lines 50-65).

receiving data handle information as reference with consistent length to generate an update data packet to update data locations: (Muller discloses sending to the host a completion descriptor which includes empty buffer addresses/indexes/pointers as references for identifying stored or storing packets locations in the buffer. The host then uses the provided completion description to allocate the buffer locations for store packets into those allocated buffer locations: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

However, Muller does not explicitly disclose the industrial controller/ the controller.

In Carter's industrial controller system, remote users can access and influence control functions of the industrial controller by modifying control parameters or/ and procedure instructions those displayed through visual presentations or/ and templates in form of a webpage containing numbers of instructions and/or procedures, see (abstract; Fig. 2; column 3, lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Carter's ideas of provide remote user ability of access and influence control functions of the industrial controller into Muller's system in order to increase efficiencies and flexibility for industrial controlling network, see (column 3, lines 40-67).

Regarding claim 22:

In addition to rejection in claim 21, Muller-Crater further discloses Internet connection: (Crater: column 4, lines 65-67; column 5).

Regarding claim 24:

In addition to rejection in claim 21, Muller-Crater further discloses updating Object via at least one of periodic occurrence, an event driven occurrence, and a request: (Crater discloses an authorization person request to modify control parameters: column 10, lines 34-53).

Regarding claim 31:

Muller discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code, the method comprising:

means for requesting tag identifiers: (tag information (e.g. predetermined protocol included in sending packet) is received at a transfer engine: abstract).

means for constructing an optimized data packet from the tag identifiers: (predetermined protocol is used as packet's flow key identifier to associate with other packets in the same flow for reassembling them into reassemble data/ datagram: abstract).

means for installing the optimized data packet: (transmitting the datagram over network: Muller, column 8, lines 15-30; column 14, lines 35-40; column 35, lines 64-67; column 36, lines 60-67; Muller: figure 18 C, item 1826).

means for refreshing the optimized data packet: (Muller discloses sending to the host a completion descriptor which includes empty buffer addresses indexes, pointers or references for identifying stored or storing packets locations in the buffer. The host then uses the provided completion description to allocate the buffer locations for store packets into those allocated

buffer locations: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

means adding data items of interest to the data packet, the data items arranged according to at least one of contiguous and non-contiguous address memory locations; means for transmitting data from the optimized data packet: (Muller discloses the host uses the provided completion description to allocate the buffer locations for store packets into those allocated buffer locations: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

means for updating via employment of handle information as reference with consistent length: (Muller discloses sending to the host a completion descriptor which includes empty buffer addresses indexes, pointers or references for identifying stored or storing packets locations in the buffer. The host then uses the provided completion description to allocate the buffer locations for store packets into those allocated buffer locations: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

However Muller does not explicitly disclose controller/ industrial controller.

In analogous art, such as, Carter's industrial controller system, remote users can access and influence control functions of the industrial controller by modifying control parameters or/ and procedure instructions those displayed through visual presentations or/ and templates in form of a webpage containing numbers of instructions and/or procedures: abstract; Fig. 2; column 3, lines 62-65; column 4, lines 6-8, 40-67; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Carter's ideas of provide remote user ability of access and influence control functions of the industrial controller into Muller's system in order to increase efficiencies and flexibility for industrial controlling network, see (column 3, lines 40-67).

Claims 25-26 are rejected under 35 U.S.C 103(a) as being un-patentable over Muller-Crater in view of Patel (U.S. 6,889,257).

Regarding claims 25-26:

Muller-Crater discloses the invention substantially as disclosed in claim 21, but does not explicitly teach method for removing object.

In analogous art, Patel discloses method for determining system conditions of the server in order to be able to modifying/adjusting packets aggregating process of transmitting the data packets to the client computer; it would have been obvious in the art to know that it needs at least one addition aggregation component based upon decreased data demands; vice versa; it would have been obvious in the art to know that Patel's aggregation system also can be able to remove the one or more secondary aggregation component based upon decreased data demands for save memory purpose; see (abstract; column 2, lines 35-67, 40-44; column 4, lines 34-67; column 5, lines 1-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Patel's ideas of aggregating packets into aggregated packet prior transmitting them into a network with Muller-Crater's system in order to be able to reduce packets lost and bandwidth utilizing, see (Patel: column 8, lines 1-14).

Claims 27-28 are rejected under 35 U.S.C 103(a) as being un-patentable over Muller-Crater in view of McCoskey et al. (U.S. 2003/0028889).

Regarding claim 27:

Muller-Crater discloses the invention substantially as disclosed in claim 21, but does not explicitly teach placing data into scanning list.

In analogous art, McCoskey discloses method of placing suggestion data in a scan list, see ([0094]).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine McCoskey's ideas of placing suggestion data in a scan list with Muller-Crater's system in order to employ a well-know standard for saving resources and development time.

Regarding claim 28:

In addition to rejection in claim 27, Muller-Crater- McCoskey further discloses the list indicates which data items are to be updated: (Muller: column 5, lines 9-10; column 55, lines 25-67; column 56, lines 1-4; figure 18 C, item 1828).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/17/2008

/Kenny S Lin/
Primary Examiner, Art Unit 2452